# RESPONSES TO COMMENTS OF THE SCIENTIFIC AND STATISTICAL COMMITTEE (SSC)

## **November 2004 Plan Team Meeting Comments:**

1. The Teams discussed the overall goals of the Ecosystem Chapter and the different ways to view ecosystem considerations, i.e from the interaction of ecosystem considerations upon a single species stock assessment, as well as in a more aggregated form to look at the impact of the aggregated catch on the ecosystem as a whole. The latter is acknowledged to be the far more difficult task, but potentially greatly beneficial as an overall objective. The Teams encourage the Ecosystem Chapter authors to include a discussion of this type of backwards look at the previous year and how the TACs established for the previous year are evaluated as an aggregated impact on the ecosystem.

## **Response:**

Total ecosystem impacts of aggregated catches are part of the ecosystem assessment objectives relating to ecosystem energy removal and redirection. Thus, total catch removals and discards and offal production need to be related to ecosystem (or community) changes. Trends in the slope and intercept of the size diversity spectrum relative to total catches are one way of looking at impacts. Also time trends in scavenger populations relative to discards and diversity indices relative to total removals would indicate possible impacts.

2. There was some discussion about splitting the Ecosystem Considerations section into two sections: Ecosystem Assessment and Ecosystem Status and Trend Information.

# Response:

The editor did not split the Ecosystem Considerations into two sections this year because the Ecosystem Assessment is still in a draft format. Predictions from the multispecies model will be incorporated into this assessment in future drafts when bycatch data can be updated and when some methodological problems are solved.

# **December 2004 SSC Comments:**

1. The Ecosystems Considerations ... document needs a concise overview section that emphasizes a few critical points that may need to be taken into consideration in the development and evaluation of the SAFE documents. Elements that should be included are: major changes in ocean climate that could affect recruitment (e.g., changes in advection patterns, water temperature, or mixing events that could affect ecosystem productivity), changes in prey populations, changes in predator populations, and major changes in impacts on other or protected species, and the aggregate effects of humans on the ecosystem. In addition, where possible, analyses of the biological and fisheries implications of these changes should be provided where known. Thus, this section of the document would provide a heads-up to changes that could affect managed fish population in the short or long term, or for critical conservation issues. Additionally, when appropriate, this section could point to gaps in our ability to interpret the changes noted and the potential need for research.

#### **Response:**

A summary of important and interesting trends was added as the Executive Summary in the front of the Ecosystem Considerations section.

2. The purposes of the Ecosystem Consideration Report will be best served if it does not become a repository of annual progress reports that provide information on the status of research programs, but little in the way of results and analysis of their significance. These might best be included as appendices that could inform the reader about ongoing work that addresses information needs identified in the chapter.

#### **Response**:

In this (November) draft, the summaries of studies pertaining to essential fish habitat and the effects of fishing gear on seafloor habitat were placed in an appendix. A summary of habitat research was kept in the main part of the Ecosystem Indicators section.

## **October 2005 SSC Comments:**

1. The Ecosystem Considerations document includes an Executive Summary of Recent Trends that provides a useful and concise overview of recent conditions and trends in the stocks and the environment in the Bering Sea and Gulf of Alaska. The SSC encourages further development of this form of synthesis of the varied and numerous sources of information that comprise the main body of the document. It might be useful to frame the synthesis in terms of the effects that humans have on the ecosystem versus the effects of the ecosystem on humans.

#### **Response:**

The Executive Summary of Recent Trends will be further developed to form a synthesis and will be framed in terms of the effects that humans have on the ecosystem versus the effects of the ecosystem on humans. This will be addressed next year (2006).

2. Also because some of the information in the document will change infrequently, whereas other items will be updated regularly, each section of the report (and website) should indicate when it was last updated.

### **Response**:

All sections now have the month and year that they were updated.

3. In the future the chapter (and website) should link stock assessment results with updates to the ecosystem assessment and consideration should be given to incorporating the climate information in to stock assessments and the ecosystem assessment.

#### **Response:**

We acknowledge that this is an important issue, and we strive and will continue to strive to attain this goal.